

EJVES EXTRA ABSTRACTS

Angioplasty and Stenting of Basilar Artery

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Symptomatic basilar artery stenosis has a poor prognosis. Surgical bypasses are technically demanding and of no proven benefit. A new generation of intravascular stents that are flexible enough to navigate the tortuosities of the vertebral artery may provide a new therapeutic approach. We report two cases of vertebrobasilar ischemia with repeat vertigo and falls. Magnetic resonance angiography revealed severe middle basilar artery stenosis in case 1. A transcranial Doppler (TCD) showed severe vertebrobasilar artery stenosis in the second case. The patients underwent uncomplicated angioplasty and stenting of the basilar arteries. The patients were well and free of symptoms after 12 and 8 months follow up, respectively. The new flexible intravascular stents may provide a novel therapeutic approach for patients with basilar artery stenosis.

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Preliminary Evaluation of Recommended Airline Exercises for Optimal Calf Muscle Pump Activity

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Objectives. A preliminary study to investigate which of the recommended airline exercises for DVT prevention produce optimal calf muscle pump activity.

Methods. Four subjects were instructed to carry out ten lower leg exercises based on those recommended by airlines for DVT prevention. An EMG sensor was used to record calf muscle activity and a motion analysis system was used to ensure the exercise was conducted correctly.

Results. Statistical analysis showed significant differences in the level of calf muscle pump activity induced by the different exercises. Heel rise foot pumps were shown to induce highest levels of activity while many exercises did not induce any significant calf muscle activity at all.

Conclusion. These findings indicate that a further, more detailed examination of the exercises recommended to passengers for DVT prevention on long distance flights should be conducted to determine the potential benefit to the health and safety of the passenger.

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